# **DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

# WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-019691 Address: 333 Burma Road **Date Inspected:** 22-Jan-2011

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name: CWI Present:** Yes Mr. Xu Le Feng. No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A Yes N/A N/A **Electrode to specification:** No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:** 

34-0006 **Bridge No: Component:** Tower and Orthotropic Box Girder (OBG)

# **Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance (QA) Inspector Shailesh Gaikwad was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

#### **NDT**

#### BAY 10:

This QA Inspector performed randomly Visual Inspection and Magnetic Particle Testing (MT) of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated a TL- 6028 (MT) report for this date. The member is identified as OBG Bike path. The weld designations reviewed are as follows.

BK008A1-001-043

BK008A8-001-013, 015, 016, 019, 020

BK008A7-001-121, 124, 130, 131

BK008A8-001-053, 055, 056, 059, 060

BK008A8-001-022, 115, 029, 032, 042, 118, 044

NDT Notification No-08259

#### **BAY 10**

This QA Inspector performed randomly Visual Inspection and Ultrasonic Testing (UT) of approximately 10% of

# WELDING INSPECTION REPORT

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the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated a TL-6027 (UT) report for this date. The member is identified as OBG Bike Path. The weld designations reviewed are as follows.

BK010A2-001-035, 050, 062, 075, 087, 095, 097 NDT Notification No-08263

This QA Inspector observed the following work in progress:

#### **BAY 10: FCAW Process:**

This QA Inspector observed ZPMC qualified welding personnel identified as 040533, 053869, Perform Flux Core Arc Welding (FCAW) on OBG Bike path railing support plate. Joint identified as BK004A2-031-004, 008, 038, 013. ZPMC QC Identified as Lijun. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2132-ESAB. For more information see attached picture number 2.

## Repair welding, SMAW Process:

This QA Inspector observed ZPMC qualified welding personnel identified as 040581 Perform Shielded Metal Arc Welding (SMAW) on OBG Bike path suspending bracket edge plate. Plate identified as BKX51A weld build up 50mm. ZPMC QC Identified as Li Peng Fei with critical welding repair report CWR-B-CWR1868. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-345-SMAW-2G (2F) Repair. For more information see attached picture number 1.

# **SMAW Process:**

This QA Inspector observed ZPMC qualified welding personnel identified as 057258, 052493 Perform Shielded Metal Arc Welding (SMAW) on OBG Bike path railing support plate. Joint identified as BK004A2-033-001, 005, 006, 010. ZPMC QC Identified as Lijun. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-P-2112.

### **SMAW Process:**

This QA Inspector observed ZPMC qualified welding personnel identified as 061938 Perform Shielded Metal Arc Welding (SMAW) on OBG Bike path. Plate identified as BK009A2 stringer plate to deck plate fit up. ZPMC QC Identified as Li Peng Fei. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-P-2112. For more information see attached picture number 2.

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.

# WELDING INSPECTION REPORT

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# **Summary of Conversations:**

Only general conversation was held between QA and QC concerning this project.

# **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Thomas Ho: 150002048250, who represents the Office of Structural Materials for your project.

| <b>Inspected By:</b> | Gaikwad,Shailesh | Quality Assurance Inspector |
|----------------------|------------------|-----------------------------|
| Reviewed By:         | Clifford,William | QA Reviewer                 |